2025 First Quarter Compliance Monitoring
&
Operational Performance Report

Reporting Period January 1 – March 31, 2025

Cameco Fuel Manufacturing Inc.
Fuel Facility Operating Licence
FFL-3641.00/2043

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Submitted to:
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Executive Summary

Cameco Corporation (Cameco) is committed to the safe, clean, and reliable operations of its facilities and continually strives to improve safety performance and processes to ensure the safety of both its employees, local residents, and the environment. CFM maintains the required programs, plans and procedures as required by the applicable regulations including but not limited to the areas of health and safety, radiation protection, environment, emergency response, fire protection, waste management, and training.

As a result of the programs, plans and procedures, CFM's operations have maintained radiation exposures to workers and the public well below the regulatory dose limits. Environmental emissions are also being controlled to levels that are a fraction of the regulatory limits. During the first quarter, there were no exceedances of the action levels in the radiation protection or environmental protection program.

In the first quarter there was no planned shutdown of the facility

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1.0 First Quarter Overview

1.1 Facility Operation

Cameco continues to strive for operational excellence at all of its facilities through consistent application of management systems to ensure that they operate in a safe, clean, and reliable manner. Corporate policies and programs, including those for Safety, Health, Environment and Quality (SHEQ) provide guidance and direction for all site-based programs and procedures that define the CFM Management System.

In the first quarter of 2023, CFM was granted a twenty-year licence by the Commission (FFL-3641.00/2043) effective March 1, 2023 until February 28, 2043 and the Licence Conditions Handbook (LCH) is dated August 31, 2023.

There were no significant changes to Structure, Systems and Components (SSC) or processes in the frirst quarter.

The LCH for the facility references core CFM documents that form the licensing basis in each safety and control area.

There were two documents that were submitted to the CNSC in the first quarter of 2025.

- Physical Security Plan (MSP 30-01), version #12 - update CFM organization roles and titles and changed Rave to Alertable.
- Fire Safety Plan (MSP 30-03), version #8 - update the CFM organization roles, update references and Appendix A to cross reference the National Fire Code of Canada 2020, along with other minor changes.

In the first quarter an Agreement between Technical Standards and Safety Authority (TSSA) and Cameco Fuel Manufacturing Inc. was renewed for authorized inspection agency services.

In the first quarter there was no planned shutdown of the facility.

There were no events in the first quarter that required reporting to the Commission as detailed in the *Reg. Doc 3.1.2 Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills*.

In the first quarter there was no exceedances of the radiation protection or environmental protection action levels.

1.2 Physical Design / Facility Modification

Modifications to facility buildings, processes, equipment, procedures, programs, or organizational structure with the potential to impact safety are evaluated through the internal change and design control process from planning through to completion. This process is used to help identify impacts and potential impacts to the licensing basis, the environment as well as to the health and safety of employees and local residents.

In the first quarter of 2025, there were no modifications undertaken that required written approval from the Commission or a person authorized by the Commission.

There were also no significant changes to the physical design of equipment, processes, or the facility in the quarter. Work on the third press continued in the first quarter with commissioning expected early in the second quarter of 2025.

2.0 Radiation Protection

This safety and control area covers the implementation of a radiation protection program, in accordance with the *Radiation Protection Regulations*. The program must ensure that contamination and radiation doses are monitored and controlled.

CFM has established action levels pertaining to radiation protection, which are listed in CFM's LCH. A result above an action level is investigated and remedial actions taken if necessary. During the first quarter there was no exceedance in the Radiation Protection program.

Whole Body Dose

Table 1 shows the first quarter whole body dose for three work groups: employees in the operations group, employees in administration/support roles, and outside contractors/visitors. The highest exposures are from the operations work group, consisting of production, inspection, and maintenance personnel. There were no action level exceedances for whole body dose in the radiation protection program during the quarter. In the first quarter, most NEWs received a whole body dose below 1 mSv (97%).

Table 1

First Quarter 2025 Whole Body Dose Results				
Work Group	**Number of Individuals**	**Average (mSv)**	**Minimum (mSv)**	**Maximum (mSv)**
Operations	113	0.24	0.00	1.31
Administration / Support	83	0.01	0.00	0.10
Contractors/Visitors	21	0.01	0.00	0.11
Monthly action level is 1.6 mSv (for NEWs such as production employees). Quarterly action level is 1.0 mSv (for NEWs such as support staff and contractors).				

Table 2 shows the quarterly average, minimum and maximum individual external whole body exposure for all NEWs from the first quarter of 2024 to the first quarter of 2025 (five monitoring periods). The average whole body dose in the first quarter for all NEWs was 0.13 mSv. The average whole body dose was lower than or equal to previous quarters except the third quarter of 2024. The maximum dose was lower than previous quarters except the third quarter of 2024. The individual with the highest exposure in the first quarter was an operator who was working in the bundle wash area. This individual normally works in the Assembly area with some coverage in the Pelleting area on the furnaces.

Table 2

Whole Body Dose Results by Quarter				
Monitoring Period	**Number of Employees**	**Average Dose (mSv)**	**Minimum Dose (mSv)**	**Maximum Dose (mSv)**
Q1 2024	209	0.13	0.00	1.43
Q2 2024	217	0.15	0.00	2.08
Q3 2024	220	0.10	0.00	0.91
Q4 2024	216	0.13	0.0	1.69
Q1 2025	217	0.13	0.0	1.31

Skin Dose

Table 3 shows the first quarter skin dose results for three work groups, employees in operations (monitored monthly), employees in administration and/or support roles and outside contractors/visitors (both monitored on a quarterly basis). The highest exposures are from the operations work group, consisting of production and maintenance personnel. The maximum skin dose for all NEWs was 12.58 mSv in the first quarter and the average skin dose for all NEWs was 0.79 mSv. The action levels for skin dose were not exceeded in the quarter. The majority of NEWs received a skin dose in the first quarter below 10 mSv (99.5%).

Table 3

First Quarter 2025 Skin Dose Results				
Work Group	**Number of Individuals**	**Average (mSv)**	**Minimum (mSv)**	**Maximum (mSv)**
Operations	113	1.51	0.00	12.58
Administration / Support	83	0.01	0.00	0.31
Contractors/Visitors	21	0.01	0.00	0.09
Monthly action level is 20.0 mSv (for NEWs such as production employees). Quarterly action level is 5.0 mSv (for NEWs such as support staff and contractors).				

Table 4 shows the employee quarterly average and maximum individual skin exposure from the first quarter of 2024 to the first quarter of 2025. The average dose was lower than the first two quarters of 2024 and the maximum dose was higher in the first quarter than previous quarters except the first quarter of 2024. The individual who received the maximum skin dose was a Pelleting area employee but was not the same individual with the maximum whole-body dose.

Table 4

Skin Dose Results by Quarter				
Monitoring Period	**Number of Employees**	**Average Dose (mSv)**	**Minimum Dose (mSv)**	**Maximum Dose (mSv)**
Q1 2024	209	1.01	0.00	18.66
Q2 2024	217	0.95	0.00	11.05
Q3 2024	220	0.62	0.00	7.63
Q4 2024	216	0.79	0.00	9.99
Q1 2025	217	0.79	0.00	12.58

Eye Dose

Table 5 shows the first quarter eye dose results for three work groups, employees in operations (monitored monthly), employees in administration and/or support roles and outside contractors/visitors (both monitored on a quarterly basis). The highest exposures are from the operations work group, consisting of production and maintenance personnel. The maximum eye dose for all NEWs was 5.92 mSv in the first quarter and the average eye dose for all NEWs was 0.42 mSv. The interim action levels for eye dose were not exceeded in the quarter. The majority of NEWs received an eye dose below 2 mSv (91%).

Table 5

First Quarter 2025 Eye Dose Results				
Work Group	**Number of Individuals**	**Average (mSv)**	**Minimum (mSv)**	**Maximum (mSv)**
Operations	113	0.81	0.00	5.92
Administration / Support	83	0.01	0.00	0.20
Contractors/Visitors	21	0.01	0.00	0.10
*Monthly interim action level is 6.0 mSv *Quarterly interim action level is 12.0 mSv.				

*Interim action levels approved by CNSC July 11, 2022

Table 6 shows the employee quarterly average and maximum individual eye exposure from the first quarter of 2024 to the first quarter of 2025. The average dose in the first quarter of 2025 was lower than or equal to the previous quarters except the third quarter of 2024. The maximum dose in the first quarter was higher than previous quarters except the first quarter of 2024. The individual who received the maximum eye dose was a Pelleting area employee and was the same individual with the maximum skin dose.

Table 6

Eye Dose Results by Quarter				
Monitoring Period	**Number of Employees**	**Average Dose (mSv)**	**Minimum Dose (mSv)**	**Maximum Dose (mSv)**
Q1 2024	209	0.51	0.00	8.33
Q2 2024	217	0.50	0.00	5.82
Q3 2024	220	0.35	0.00	3.70
Q4 2024	216	0.42	0.00	4.61
Q1 2025	217	0.42	0.00	5.92

Extremity Dose

The action level for extremity dose at CFM is 55 mSv per quarter. The quarterly action level applies to production NEWs who regularly handle product as part of their daily task. In 2021, CFM completed an assessment for extremity dose to align with the Radiation Protection Regulations (RPR) issued in 2020. Specifically, section 8 of the RPR adds the requirement to use a licensed dosimetry service for equivalent doses to the skin, hands, and feet if the annual dose would be over 50 mSv. It was determined that the extremity dose for NEWs at CFM do not exceed 50 mSv/yr; and therefore, NEWs are not required to wear dosimeters from a licensed dosimetry service provider. Extremity dose can be estimated using historic data.

If there is a change in processing techniques or work configurations that would impact extremity dose, then an assessment is required to determine if the 50 mSv/yr criteria would be exceeded. Changes to equipment or processes are captured through CFM's Management of Change (MoC) process. In the fourth quarter of 2024, the bundle washing activities began that were required after the fire suppression system was discharged in September. This activity continued until the end of February 2025. All team members assigned to the project underwent an ALARA assessment to determine the impact to the individual’s extremity dose. Employees who worked in job tasks that were in higher extremity dose areas had their time limited to work on the bundle wash project. Team members were also provided with ring dosimeters to wear during the project to assess the potential dose accrued. In the first quarter, there were no new team members assigned to the project therefore no new ALARA assessments were required. In total fourteen assessments were at the start of the project. The results from the ring dosimeters indicated that all employees received similar extremity dose as their normal work activities and would be well below 50 mSv for the year. Therefore, extremity dose does not need to be adjusted for the first quarter.

Table 7 shows the average, minimum, and maximum extremity dose for NEWs over the period from the first quarter of 2024 to the first quarter of 2025. If the second quarter dose from 2021 was used as the basis for the first quarter of 2025 the average dose is estimated at 1.90 mSv and the maximum dose is estimated to be 10.50 mSv.

Table 7

Extremity Dose Results by Quarter				
Monitoring Period	**Number of Employees**	**Average Dose (mSv)**	**Minimum Dose (mSv)**	**Maximum Dose (mSv)**
Q1 2024	-	1.90*	0.00	10.50*
Q2 2024	-	1.90*	0.00	10.50*
Q3 2024	-	1.25+	0.00	7.87+
Q4 2024	-	1.90*	0.00	10.50*
Q1 2025	-	1.90*	0.00	10.50*

*estimation based on Q2 2021 data
+ estimation based on Q3 2021 data

Urine Analysis

The action level for a single routine urine sample is 10 µg/L of uranium concentration. During the quarter there was no exceedance of the urine analysis action level. Routine urine samples results analyzed during the first quarter are provided in Table 8 below.

Table 8

First Quarter Routine Urine Analysis Results				
Work Group	**Number of Samples**	**Average (µg/L)**	**Minimum* (µg/L)**	**Maximum (µg/L)**
Operations	460	0.23	<0.20	1.00
Routine urine sample action level is 10 µg/L				

*detection limit of equipment is 0.2 µg/L therefore reported as <0.20 µg/L

Internal Dose

Routine urine analysis samples are collected on a biweekly basis for trending purposes; if an acute uptake is noted it is verified using lung counting and dose assigned if required.

In the first quarter of 2025, there were no routine urine sample results that were above the internal administrative level of 4.0 µgU/L.

There were no lung counts conducted during the first quarter. The next campaign is scheduled for June of 2025.

Contamination Control

CFM has other programs to ensure radiation exposure levels remain low. An extensive contamination control program at CFM is zone control. The facility is divided into four zones for contamination control purposes. Zone 1 areas are designated as clean areas with no contamination permitted. Food and drink can be consumed in these areas and include the lunchroom and office areas. Zone 2 areas contain no open sources of radioactivity but have the potential for contamination. These areas include the assembly area, change rooms and the machine shop. Zone 3 areas are the access points to Zone 4. Zone 4 areas contain open sources of radioactivity and include the Pelleting Area. Consumption of food and drink are restricted in Zones 2, 3, and 4.

The administrative limits are provided in Table 9 as well as the routine contamination monitoring results for the first quarter. Of the 696 samples taken none exceeded the internal administrative control limits (ACL).

Table 9

First Quarter Alpha Contamination Monitoring Results			
Area	**# of Samples Taken**	**Administrative Limits (Bq/cm^2)**	**# of Samples Above Limits**
Zone 1	120	0.4	0
Zone 2	198	4.0	0
Zone 3	42	4.0	0
Zone 4	336	40	0

In-Plant Air

Routine air sampling is conducted at workstations throughout the plant continuously during operations to monitor airborne uranium dioxide in the work environment. The results for the first quarter of 2025 taken in each area, including the CAM heads in the PP2 area, dry Waste Treatment area and the Furnace Hall are shown in Table 10 below. There were no results above the 80-hour ACL or the 2000 hour ACL in the first quarter. In December of 2024, the in-plant air sampling was reduced to three locations at the manual grinders and in the Pangborn room. This transition is part of the final stages of the upgrade to the CAMhead system in the furnace hall of the Pelleting Area. Once the manual grinders are replaced the system will be removed completely. This is expected in the next year.

Table 10

First Quarter Uranium In-plant Air Sampling Results					
Plant Area	**# of Samples**	**Average (µg U/m³)**	**Maximum (µg U/m³)**	**# Samples > ACL 2000 hr**	**# Samples > ACL 80 hr**
Pangborn Room	125	5	25	0	0
UO_2 Grinders	250	1	6	0	0
Dry Waste Treatment	450	1	10	0	0
Furnace Hall	540	1	7	0	0
PP2	720	1	5	0	0
TOTAL	**2085**	**1**	**25**	**0**	**0**
2000-hour Administrative Control Limit = 52 µg/m³					
80-hour Administrative Control Limit = 595 µg/m³					

Gamma Surveys

An ongoing ALARA initiative involves posting OSLD's around the facility to determine areas of elevated gamma radiation. The result for each location in the first quarter is summarized in Table 10. The results illustrate that the Fuel Storage Area had the highest gamma fields (6.3 µSv/hr), which is expected due to the amount of product stored in the area. The area is posted instructing workers to limit the time spent in this area. The next highest reading (5.1 µSv/hr) was in the PP2 Receiving area. This is also expected due to the amount of raw material stored in this area. Employees limit their time in this area as well.

Table 11

First Quarter Gamma Survey Results						
Location #	**Area**	**Result (µSv/hr)**		**Location #**	**Area**	**Result (µSv/hr)**
13	Kitting	0.3		37	PP2 Powder Rec. N.	1.5
14	S Stacking	1.5		38	Powder Receipt	0.2
15	Stacking	0.1		39	U_3O_8 Add-back	0.6
16	Pelleting Entry	0.5		40	S End Cap	0.2
17	Pelleting Lab	0.1		41	End Cap	0.3
18	S Grinding	1.7		42	N End Cap	0.1
19	Grinding	0.7		43	E Offices	0.0
20	N Grinding	0.7		44	S End Plate	0.0
21	S Wall	0.0		45	End Plate	0.0
22	S Furnace	0.5		46	N End Plate	0.0
23	Furnace	0.9		47	W Offices	0.0
24	PP2 South	0.1		48	S Inspection	0.1
25	SE Wall	0.3		49	Inspection	0.2
26	E Wall Furnace	0.5		50	N Inspection	0.9
27	NE Wall	0.4		51	W Inspection	0.0
28	N Corridor	0.2		52	Strapping Bay	0.6
29	Ceramics Lab	0.1		53	Packing	0.6
30	R7#1 East Wall	2.1		54	Fuel Storage Area	6.3
31	PP2 West Wall	0.6		55	Graphite East	0.3
32	S Pressing	0.7		56	BMS Loading	0.9
33	N Pressing	0.9		57	PP2 Receiving	5.1
34	Pangborn	0.8		58	PP2 Press R53-1	1.6
35	S. Waste Treat	1.4		59	PP2 East Wall	0.6
36	N. Waste Treat	0.5				

3.0 Conventional Health and Safety

This safety and control area covers the implementation of a program to manage non-radiological workplace safety hazards and to protect personnel and equipment. Table 12 shows the safety statistics for the Port Hope facility.

Table 12

2025 Safety Statistics					
Year / Parameter	**Q1**	**Q2**	**Q3**	**Q4**	**YTD**
First Aid Injuries	2				2
Medical Diagnostic Injuries	0				0
Medical Treatment Injuries	0				0
Lost Time Injuries	0				0
Lost Time Injury Frequency	0.0				0.0
Lost Time Injury Severity	0.0				0.0

There were no lost time incidents that occurred in the first quarter. The Total Recordable Injury Rate (TRIR) for January through March 2025 is 0.0 for the Port Hope facility. The year to date is also 0.0.

Health and Safety Activities

- **Communications**: The first quarter safety meetings were held each month with a different topic including Safe Return to Work (Ergonomics, Diversity and Inclusion, Winter Safety, General Safety Rules and Self Check, Self Check / STAR , Mental Health, and Sweep Inspections), Personal Protective Equipment, and Respiratory Protection. Each month an update is also included for the previous month on 4 topics: Safe, healthy, and rewarding workplace, clean environment, supportive communities, and outstanding financial performance. Safety statistics as well as the status on quality and production targets are also included in the update on these topics.
- **Education and Training:** During the first quarter work continued on the SAT packages for PP2, BMS, and Waste Treatment operators as well as Radiation Technicians. The analysis phase was completed for the Radiation Technicians near the end of the quarter. Waste Treatment and PP2 operators are still being completed with analysis nearing completion.

- **Safety Awareness Activities**: In the first quarter the engagement committee hosted a Safety Blitz Bingo using safety topics drawn each day and prizes for the first full Bingo card.
- **JHSC:** In the first quarter of 2025, the JHSC developed yearly objectives to achieve a set of goals to ensure our team members are safe in all aspects of their work. These goals include:
  - Comply with the legislative standards defined by the JHSC
  - Create a culture of safety
  - Help create an injury free workplace
  - Support health and safety initiatives set by management
  - Increase visibility and communication

  Focus for the year will be on hand injury reduction as well as the promotion of safety wins to encourage team members to look for proactive safety improvements. The first quarter also included the continued promotion of winter safety through winter footwear checks.
- **Safety & Industrial Hygiene:** Eight corporate standard assessments were completed to ensure CFM safety programs align with corporate safety requirements. Annual regulatory reports were submitted to ESDC. Area and personal air sampling were being arranged at our weld prep locations to evaluate potential levels of respirable graphite particulate.

4.0 Environmental Protection

This safety and control area covers the programs that monitor and control all releases of nuclear and hazardous substances into the environment, as well as their effects on the environment, as the result of licensed activities.

Public Dose

Public dose is calculated by summing the total amount of uranium dioxide released to air in process stacks, building ventilation as well as liquid emissions, and is added to the gamma dose to the critical receptor (represented by location #12). This is demonstrated in the following formula:

$$\text{Public Dose} = \text{Dose}_{\text{Air (stacks)}} + \text{Dose}_{\text{Air (building ventilation)}} + \text{Dose}_{\text{Water}} + \text{Dose}_{\text{Gamma}}$$

The estimated public dose, along with each component, for the first quarter of 2024 to the first quarter of 2025 is provided in Table 13. In the second quarter of 2024 the public dose reported was adjusted to consider the annual release limit versus a quarterly fraction of the release limit for air and liquid emissions. This represents a more accurate calculation of public dose. The data provided in Table 13 has been adjusted to reflect the change in the calculation for trending purposes. The total dose to the member of the public from air, liquid emissions and gamma levels for the quarter is calculated to be 0.006 mSv, which is lower than previous quarters. Late in the fourth quarter a shield wall was construction to reduce the gamma levels to the critical receptor. In addition, bundles that were removed from the Fuel Storage Building were not replaced in the first quarter; therefore, the dose to the critical receptor was extremely low in the first quarter of 2025.

Table 13

Public Dose by Quarter (mSv/quarter)					
DRL Component	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**
Air (stacks)	0.000	0.000	0.000	0.000	0.000
Air (building ventilation)	0.006	0.007	0.008	0.006	0.006
Liquid	0.000	0.000	0.000	0.000	0.000
Gamma (Location 12)	0.063	0.055	0.087	0.007	0.000
Total dose to Critical Receptor (location #12)	0.069	0.062	0.095	0.014	0.006

Gamma Monitoring

The perimeter gamma derived release limit for the critical receptor at location #12 is 1.35 µSv/hr and the action level is 1.0 µSv/hr. The other DRL's listed for gamma monitoring are for location #1 and location #2 at 4.96 µSv/hr and 0.46 µSv/hr respectively with the action level of 0.2 µSv/hr for both locations. There were no exceedances of the DRL's or the action levels during the first quarter.

Table 14 provides the quarterly gamma levels in µSv/hr for all fence line monitoring locations (i.e., 1-12) for the quarter.

Table 14

First Quarter 2025 Gamma Monitoring Results (µSv/hr)		
Location	**Action Level**	**Dose Rate**
1	0.2	0.00
2	0.2	0.00
3	1.0	0.00
4	1.0	0.00
5	1.0	0.00
6	1.0	0.00
7	1.0	0.00
8	1.0	0.00
9	1.0	0.00
10	1.0	0.00
11	1.0	0.00
12	1.0	0.00

The monitoring results for location 12 (closest location to the critical receptor) from the first quarter in 2024 to the first quarter of 2025 are provided in Table 15. Results have been corrected to consider background gamma levels by subtracting 0.08 µSv/hr. The dose rate for the first quarter of 2025 at location 12 is lower than previous quarters. The dose rate in the first quarter was lower due to the removal of bundles from the Fuel Storage Building and the installation of the shield wall.

Table 15

Gamma Monitoring Results at Critical Receptor by Quarter (µSv/hr)			
Period	**Regulatory Limit (DRL)**	**Action Level**	**DRL Contribution**
Q1 2024	1.35	1.0	0.34
Q2 2024	1.35	1.0	0.30
Q3 2024	1.35	1.0	0.47
Q4 2024	1.32	1.0	0.04
Q1 2025	1.32	1.0	0.00

Stack Emissions

The total amount of uranium dioxide released to the environment during the quarter in gaseous effluent from stacks was 0.001 kg. The action level for stack emissions is 2.0 µg/m³ uranium concentration for a daily stack reading. There were no exceedances of the action levels with respect to air emissions during the quarter. Table 16 provides the average and maximum uranium concentration for all stacks in µg/m³ from the first quarter of 2024 to the first quarter of 2025. The overall average concentrations in µg/m³ measured in stack emissions in the first quarter were similar to the concentrations in previous quarters.

In the second quarter of 2024, a new database for calculating environmental data was commissioned. One of the improvements was the ability to calculate and report the stack data in grams/hour (g/hr). After collecting data for stack emissions in this format in the new database, CFM is in the process of setting an action level in g/hr units. Table 17 provides the average and maximum uranium results for all stacks in g/hr from the second quarter of 2024 to the first quarter of 2025. The results reported in g/hr show that stack emissions from the Mist Collector were the highest emitter which is similar to the previous results.

Table 16

Daily Stack Emissions by Quarter (µg/m³)							
Source	**Action Level**	**Avg. / Max.**	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**
PP2 West	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.0	0.0	0.0	0.1	0.1
PP2 East	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.0	0.0	0.0	0.1	0.0
Waste Treatment Area Absolute	2.0	Avg.	0.1	0.0	0.0	0.0	0.0
		Max.	0.4	0.1	0.1	0.1	0.1
BMS Extraction	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.1	0.0	0.3	0.4	0.1
Hoffman Vacuum	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.0	0.0	0.0	0.1	0.0
Pangborn North Dust Collector	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.1	0.2	0.3	0.4	0.1
Pangborn South Dust Collector	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.0	0.0	0.1	0.1	0.2
DeVilbiss Mist Collector	2.0	Avg.	0.0	0.0	0.1	0.1	0.1
		Max.	0.1	0.2	0.2	0.2	0.3
Furnace Burn-off	2.0	Avg.	0.0	0.0	0.0	0.0	0.0
		Max.	0.0	0.0	0.0	0.1	0.0
Overall	**2.0**	**Avg.**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
		Max.	**0.4**	**0.2**	**0.3**	**0.4**	**0.3**

Table 17

Daily Stack Emissions by Quarter (g/hr)							
Source	**Release Limit**	**Avg. / Max.**	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**
PP2 West	1.2	Avg.	-	0.0000	0.0000	0.0000	0.0000
		Max.	-	0.0001	0.0001	0.0007	0.0004
PP2 East	1.2	Avg.	-	0.0000	0.0000	0.0000	0.0000
		Max.	-	0.0001	0.0001	0.0005	0.0001
Waste Treatment Area Absolute	1.2	Avg.	-	0.0000	0.0000	0.0001	0.0000
		Max.	-	0.0004	0.0002	0.0003	0.0002
BMS Extraction	1.2	Avg.	-	0.0000	0.0000	0.0000	0.0000
		Max.	-	0.0001	0.0003	0.0004	0.0001
Hoffman Vacuum	1.2	Avg.	-	0.0000	0.0000	0.0000	0.0000
		Max.	-	0.0000	0.0000	0.0000	0.0000
Pangborn North Dust Collector	1.2	Avg.	-	0.0001	0.0001	0.0001	0.0000
		Max.	-	0.0005	0.0008	0.0011	0.0003
Pangborn South Dust Collector	1.2	Avg.	-	0.0001	0.0001	0.0001	0.0001
		Max.	-	0.0003	0.0005	0.0005	0.0016
DeVilbiss Mist Collector	1.2	Avg.	-	0.0003	0.0005	0.0006	0.0006
		Max.	-	0.0014	0.0010	0.0012	0.0015
Furnace Burn-off	1.2	Avg.	-	0.0000	0.0000	0.0001	0.0001
		Max.	-	0.0002	0.0003	0.0009	0.0005
Overall	**1.2**	**Avg.**	-	**0.0001**	**0.0001**	**0.0001**	**0.0001**
		Max.	-	**0.0014**	**0.0010**	**0.0012**	**0.0016**

Building Ventilation Emissions

The action level for building ventilation is 1.0 g/hr and is monitored daily for the Pelleting Area and 0.4 g/hr for the PP2 area. There were no exceedances of either action level in the first quarter.

Beginning in the second quarter of 2024, the emissions for the Pelleting Area are calculated using the continuous air sampling system (CAM heads) instead of the fixed air sampling system which was used prior to this change. CAM heads continuously monitor air in the area 24 hours a day, 7 days a week for the presence of airborne radioactive particulate contamination and signal an alarm when an airborne release occurs at specified levels.

The estimated release of uranium dioxide in exhaust ventilation from both areas during the quarter was 0.24 kg (0.22 kg from the Pelleting Area and 0.02 kg from the PP2 area).

Table 18 provides the average and maximum uranium concentration emitted through the building ventilation system in g/hr from the first quarter of 2024 to the first quarter of 2025.

The table demonstrates that the PP2 area has much lower emissions through building ventilation than the Pelleting Area and the results are consistent between the quarters with the Pelleting Area maximum result lower than previous quarters.

Table 18

Building Ventilation Rates by Quarter (g/hr)							
Parameter	**Action Level**	**Measure**	**Q1* 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**
Uranium Emissions from Pelleting Area	1.0	Average	0.15	0.11	0.14	0.10	0.10
		Maximum	0.45	0.33	0.53	0.48	0.24
		Minimum	0.09	0.04	0.03	0.03	0.03
Uranium Emissions from PP2 Area	0.4	Average	0.01	0.01	0.01	0.01	0.01
		Maximum	0.05	0.05	0.05	0.04	0.02
		Minimum	0.00	0.00	0.00	0.00	0.00

* Results reported using in plant air samplers

Liquid Emissions

The action level for liquid effluent released to the sewer is 0.10 mg/L. In the first quarter there was no exceedance of the action level.

Table 19 provides the average and maximum uranium concentration for a single composite sample from the first quarter of 2024 to the first quarter of 2025. Also provided in the table is the minimum and maximum pH measured in the samples. The discharge in the first quarter is equal to previous quarters except the fourth quarter 2024 which was lower.

Table 19

Sanitary Sewer Emissions by Quarter							
Parameter	**Action Level (mg/L)**	**Measure**	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**
Uranium (mg/L)	0.1	Average	0.02	0.01	0.01	0.01	0.01
		Maximum	0.03	0.02	0.02	0.02	0.03
pH (pH units)	6.5	Minimum	7.1	7.5	7.4	7.4	7.2
	9.0	Maximum	7.6	8.0	8.2	8.0	7.9
Volume of water	-	(m^3)	5377	5142	5197	4111	4831
Estimated Discharge	-	(kg)	0.09	0.07	0.05	0.04	0.07

Ambient Air Monitoring

High volume air samples are collected in the four corners of the CFM property. Table 20 shows the quarterly average and maximum results for all four locations from the first quarter of 2024 to the first quarter of 2025. The maximum result occurred in the North West location beside the Waste Storage Building.

Table 20

Overall Uranium-in-Air Concentration at Hi-Vol Stations by Quarter (µg/m^3)					
Parameter	**Q1 2024**	**Q2 2024**	**Q3 2024**	**Q4 2024**	**Q1 2025**
Average	0.0002	0.0003	0.0002	0.0004	0.0002
Maximum	0.0004	0.0005	0.0006	0.0054	0.0009

Table 21 provides the quarterly average and maximum uranium-in-air concentrations for all locations from the first quarter of 2024 to the first quarter of 2025.

Table 21

Uranium-in-Air Concentration at Hi-Vol Stations by Quarter (µg/m³)					
Quarter	**Result**	**East**	**North**	**Northwest**	**Southwest**
Q1 2024	Average	0.0001	0.0002	0.0002	0.0002
	Maximum	0.0002	0.0003	0.0003	0.0004
Q2 2024	Average	0.0002	0.0003	0.0003	0.0003
	Maximum	0.0005	0.0005	0.0004	0.0005
Q3 2024	Average	0.0002	0.0003	0.0003	0.0002
	Maximum	0.0003	0.0005	0.0006	0.0005
Q4 2024	Average	0.0003	0.0007	0.0003	0.0004
	Maximum	0.0023	0.0054	0.0023	0.0033
Q1 2025	Average	0.0002	0.0002	0.0002	0.0002
	Maximum	0.0004	0.0004	0.0009	0.0004

Legacy Waste Management

In the first quarter CFM completed the review of drummed material that did not meet the disposal site's criteria. Each drum was opened systematically to visually identify the contents, sort, and segregate like materials. From this activity, recoverable uranium material was consolidated to be verified and the uranium recovered with other scrap material. Marginally contaminated material was repackaged, rescanned, and prepped for disposal in the United States. An inventory of drums generated in this project containing recoverable uranium will be stored onsite.

CFM continues to progress phase 1 of the trailer project in 2025. Three shipments of marginally contaminated material were made at an appropriately permitted facility in the United States in the first quarter.

5.0 Public Information Program

During the first quarter of 2025, CFM continued to meet the requirements of CNSC RD/GD 3.2.1, Public Information and Disclosure programs.

Public Engagement

In early January, Cameco continued its holiday sponsored recreational activities in Port Hope with a free public swim on January 2, and open gym at the Town Park Recreation Centre on January 3.

On January 15, Cameco representatives attended the Government of Ontario and Ontario Power Generation's announcement in Wesleyville regarding a potential new nuclear generating station.

From January 19 to 26, Cameco sponsored the Ontario Curling Championships in Cobourg.

On February 7, Cameco representatives sponsored and attended the Rotary Club of Cobourg's Mississippi River Boat Cruise Event in Cobourg.

On February 11 and 13, Cameco Fuel Manufacturing offered tours to Cameco employee family and friends to learn more about the Cobourg and Port Hope facilities.

On February 26, Cameco announced a partnership with the Ryan Huffman Foundation to be the title sponsor of its 4th annual charity golf tournament taking place in May in Port Hope. A news release was issued to local media, posted on camecofuel.com and shared on social media.

On March 4, approximately 20 NAYGN members toured CFM Port Hope. Also, that day, Cameco representatives met with staff from Port Hope Economic Development to discuss potential opportunities to work together and stay informed on operations.

On March 5, Ignace Town Council and representatives from the Nuclear Waste Management Organization toured CFM's Port Hope facilities.

On March 21, members of OPG's Indigenous Relations and Partnerships team toured CFM Port Hope as part of Cameco's ongoing relationship with OPG to enhance Indigenous engagement, improve information sharing and collaborate across the sector.

On March 22, the Winter 2025 issue of Energize was dropped into mailboxes of all Port Hope residents. This edition featured stories of Cameco's partnership with the Ryan Huffman Foundation, Cameco's 2024 Community Investments, Building 27's demolition as a major milestone in the Vision in Motion project at the Port Hope Conversion Facility, a Did you know section on CANDU Fuel Bundles, as well as a save the date for 2025 Cameco Charity Golf Tournament.

On March 26, two CFM employees, alongside three Port Hope Conversion Facility employees attended Junior Achievement's World of Choices event to meet with local middle and high schools' students and discuss careers in the nuclear sector.

On March 28, Cameco representatives sponsored and attended the Northumberland Central Chamber of Commerce's Business Achievement Awards. Cameco also presented an award to one of the recognized businesses.

On March 31, Cameco announced its support of the new Northumberland County Archives and Museum facility and its inaugural exhibit - Gidinawendimin, meaning "We are all related" in Anishinaabemowin – also known as the Ojibwe language. A news release was issued to local media, posted on camecofuel.com and shared on social media.

Cameco provided free advertising to local charitable organizations with its sponsorship of MyFM's Community Partner Program. Through the quarter, Big Brother Big Sisters of Northumberland, Green Wood Coalition and Cornerstone Family Violence Prevention Centre benefitted from this sponsorship by receiving free advertising spots.

Public Disclosure

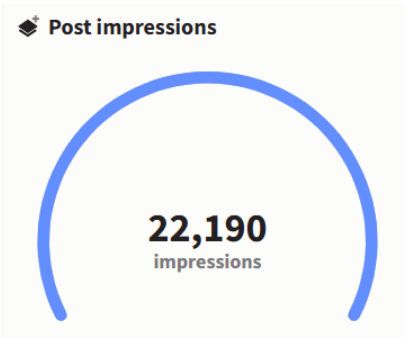
There was one public disclosure during the first quarter: Environment & Safety | Cameco

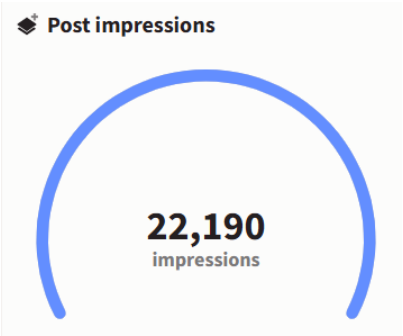
Past Reporting

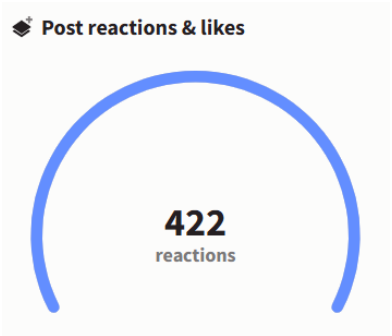
Posting Date	February 21, 2025
Incident Date	February 20, 2025
Incident	False Fire Alarm
Details	At approximately 12:05 p.m. the fire panel indicated an alarm for the Fuel Storage Building dry chemical system at CFM Port Hope. Site personnel performed a visual check on the exterior of the building and no smoke or flame were detected. The Port Hope Fire Emergency Services responded to the site and investigated the cause of the alarm. It was confirmed that there was no indication of fire and there was no release of the dry chemical suppression system. The incident is suspected to be a false alarm. There was no health or safety risk posed to the public or the environment.
Corrective Action	Emergency Operations Centre (EOC) was activated. Site personnel safely evacuated and were accounted for. Port Hope Fire Emergency Services responded to the incident. The system has been put on an impairment (bypass). Cameco has notified the Canadian Nuclear Safety Commission.
Cameco Environmental Effect Rating	1

Social Media

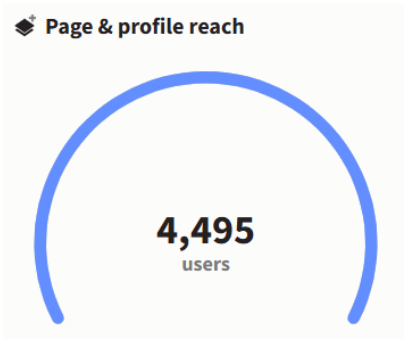
Facebook: *January 1 to March 31, 2025*

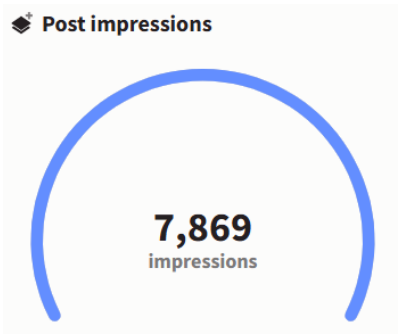




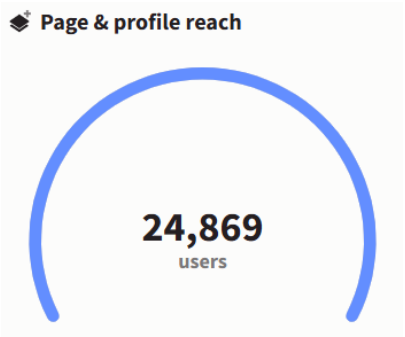


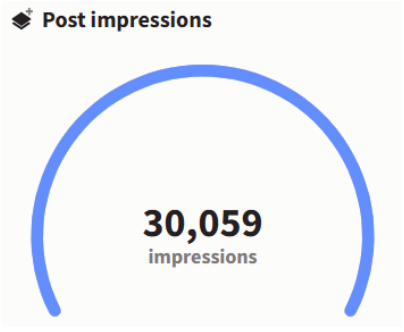
Other platforms (Instagram, X & YouTube): *January 1 to March 31, 2025*

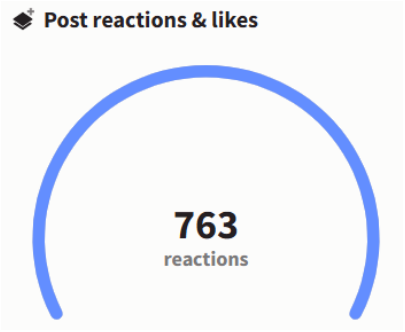




All Platforms: *January 1 to March 31, 2025*







Top Performing Posts

Top posts

Last week, Dave Ingalls, general manager of Cameco's Port Hope Conversion Facility (PHCF), presented a cheque to the Northumberland Fare Share Food Bank for $20,000 on behalf of Cameco employees. The money was raised in

59 likes and reactions

This week, Cameco Fuel Manufacturing's Engagement Committee presented a cheque to Ed's House Northumberland Hospice Care Centre for the proceeds of its recent Decadent Dessert Bake Sale held in memory of a

42 likes and reactions

Cameco is teaming up with the Ryan Huffman Foundation as presenting sponsor of their 4th Annual Charity Golf Tournament. The premier event of the year, taking place on Friday, May 9, 2025, at Dalewood Golf Club, will raise

42 likes and reactions

Top posts

Last week, Dave Ingalls, general manager of Cameco's Port Hope Conversion Facility, presented a cheque to the Northumberland Fare Share Food Bank for $20,000 on behalf of Cameco employees. The money was raised in

37 likes

Cameco is teaming up with the Ryan Huffman Foundation as presenting sponsor of their 4th Annual Charity Golf Tournament. The premier event of the year, taking place on Friday, May 9, 2025, at Dalewood Golf Club, will raise

34 likes

On Thursday, Cameco welcomed high school chemistry and trade students along with their teachers from E.s.c. Jeunesse-Nord for a tour of Blind River Refinery. This is the first of many secondary school tours that Cameco will

33 likes

Top tweets

Keir Thomas, manager of maintenance at Blind River Refinery, recently spoke with Blind River Public School students about our operations and how we help bring electricity into their homes. We're grateful for the

12.35% engagement rate

On Tuesday, Terry Davis, general manager of Blind River Refinery, had the opportunity to speak with W.C. Eaket students and staff to share the important role Blind River Refinery plays in the nuclear fuel cycle.

10.34% engagement rate

@CamecoOntario
Jan 16, 17:17

Cameco Corporation welcomes the recent announcement from the Government of Ontario and Ontario Power Generation (OPG) naming Port Hope's Wesleyville site as the potential future home of Ontario's newest nuclear energy generating station.
https://twitter.com/opg/status/1879931195997463020

8.6% engagement rate

Summary

Cameco Ontario's 64 posts (combined across Facebook, Instagram, X and YouTube):

- Facebook: 22 posts
- Instagram: 20 posts
- X: 22 posts

These posts covered information such as:

- Indigenous engagement activities including:
  - OPG's Indigenous Relations and Partnerships team touring Port Hope Conversion Facility and CFM Port Hope
  - Cameco's support of the new Northumberland County Archives and Museum facility and its inaugural exhibition: Gidinawendimin
- Community investment activities, including:
  - Cameco's employee fundraising donation to Northumberland Fare Share Food Bank
  - Cameco's announcement of becoming the presenting sponsor for the Ryan Huffman Foundation golf tournament
  - CFM Port Hope's bake sale donation to Ed's House Hospice Care Centre
- Career opportunities

Website

Cameco revised and updated content on the following website pages:

- Cameco Fuel Manufacturing | Cameco Fuel Services
- Safety | Cameco Fuel Services
- Community | Cameco Fuel Services

Winter issue of Energize:

- Energize - Winter 2025 | Cameco Fuel Services

The Q4 2024 Compliance Report:

- CFM Q4 2024 Compliance Report

One public disclosure:

- CFM: Environment & Safety | Cameco

News release announcing Cameco and Ryan Huffman Foundation partnership:

- Cameco and Ryan Huffman Foundation team up for Mental Health | Cameco Fuel Services

News release announcing Cameco support of Northumberland Archives and Museum inaugural Michi Saagiig Language Exhibit:

- Cameco supports Northumberland County Archives & Museum and inaugural Michi Saagiig Language Exhibit | Cameco Fuel Services

Media Analysis

Cameco received media coverage for its sponsorship of Operation Red Nose:

- https://www.intelligencer.ca/news/local-news/operation-red-nose-wraps-up-another-successful-season-in-northumberland

Cameco received media coverage for its partnership with the Ryan Huffman Foundation:

- Cameco+Ryan Huffman announcement.Feb 2025 v3 1.png - Today's Northumberland - Your Source For What's Happening Locally and Beyond
- Cameco and Ryan Huffman Foundation Team Up for Mental Health - Today's Northumberland - Your Source For What's Happening Locally and Beyond
- COMMUNITY SPOTLIGHT: Cameco partners with Ryan Huffman Foundation for mental health charity golf tournament | 93.3 myFM

Cameco received media coverage for its partnership with Northumberland County Museum and Archives:

- Cameco Supports Northumberland County Archives & Museum - Today's Northumberland - Your Source For What's Happening Locally and Beyond

Communication Products

Winter issue of Energize

- Energize - Winter 2025 | Cameco Fuel Services

News release announcing Cameco and Ryan Huffman Foundation partnership:

- Cameco and Ryan Huffman Foundation team up for Mental Health | Cameco Fuel Services

News release announcing Cameco support of Northumberland Archives and Museum inaugural Michi Saagiig Language Exhibit:

- Cameco supports Northumberland County Archives & Museum and inaugural Michi Saagiig Language Exhibit | Cameco Fuel Services

6.0 Indigenous Engagement

Cameco continues regular engagement with Curve Lake First Nation (CLFN) and the Mississaugas of Scugog Island First Nation (MSIFN).

On January 10, Cameco met with members of MSIFN's Education Department to discuss the development of a scholarship program for MSIFN members.

On March 18, Cameco hosted members of CLFN for an Environmental Working Group meeting. The meeting provided updates on the Vision in Motion project (VIM), and planning 2025 joint commitments.

On March 31 Cameco shared its news release with CLFN and MSIFN, announcing support for Northumberland County Archives and Museum's (NCAM) new facility and inaugural Michi Saagiig Language Exhibit that will celebrate Anishinaabemeowin in the Michi Saagiig dialect, the first predominant language spoken on this territory.

On February 25 a public disclosure regarding a false fire alarm was shared with Curve Lake, Mississaugas of Scugog Island, and Hiawatha First Nations.

The 2024 4th Quarter Compliance Report for CFM was sent to Curve Lake, Alderville, Hiawatha, Mississaugas of Scugog Island, Mohawks of the Bay of Quinte and Chippewas of Rama First Nations on March 6.

7.0 OTHER MATTERS OF REGULATORY INTEREST

There were no processing activities of enriched material conducted on site in the first quarter of 2025 and CFM met all site-specific reporting requirements.

8.0 CONCLUDING REMARKS

Cameco is committed to the safe, clean, and reliable operations of its facilities and continually strives to improve safety performance and processes to ensure the safety of both its employees and the local residents.

During the first quarter of 2025, CFM did not exceed any CNSC regulatory limits. CFM maintained environmental emissions and public radiation exposures to levels that are a fraction of the regulatory limits.

Cameco's relationship with residents remains strong and we are committed to maintaining the strong support and trust we have developed over the past several years.